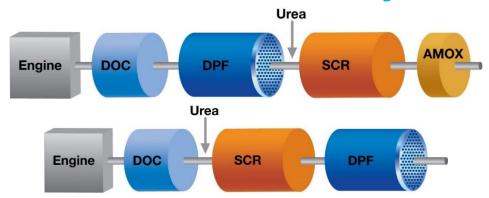


### **Traditional Solutions**

# **Diesel Emissions Catalysts**



#### **DOC** (Diesel Oxidation Catalyst)

Removes CO (carbon monoxide), HC (hydrocarbons), and some PM (particulate matter).

- Low light-off temperature
- High sulfur tolerance
- Platinum or Platinum-Paladium depending on application

#### **DPF** (Diesel Particulate Filter)

A DPF, or CSF (Catalyzed Soot Filter), traps PM and then uses a patented catalytic technology to help oxidize it.

- Lower regeneration temperature
- Higher passive regeneration
- More efficient active regeneration

#### **SCR** (Selective Catalytic Reduction)

Converts NOx (nitrogen oxides) into water and nitrogen with the use of a urea solution (e.g. AdBlue® by BASF).

- Wide temperature range
- Improved resistance to HC poisoning
- Increased durability

## **AMOX** (Ammonia Oxidation catalyst)

Removes any excess ammonia.

- Optional
- Can be added to rear of the SCR

#### LNT (Lean NOx Trap)

Adsorbs NOx during lean engine operation. During rich operation, NOx is reduced to nitrogen over the catalyst.

- High NOx removal activity
- Low light-off temperature

#### **SCR** on Filter

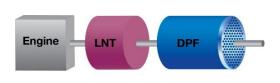
SCR on a DPF for NOx and PM control on one substrate.

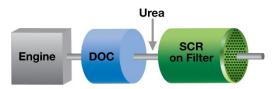
- Durable for active filter regeneration
- Maintains same performance as combination of catalysts
- Can save space and weight

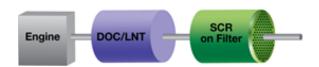
#### **DOC/LNT** and SCR on Filter

Controls CO, HC, NOx and PM with just two substrates. The DOC/LNT generates ammonia for the SCR.

- No urea injection system required
- Can reduce weight and save space
- Can lower backpressure (less CO<sub>2</sub>)







#### **About Us**

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